

**Fig. 1**



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FOIA b 7 - DEX

# METHOD AND SYSTEM FOR OPTIMIZING INGREDIENT BLENDING

Inventors: Sara J. Trenhaile

GMI Docket No. 5605USA

Page 2 of 12 pages

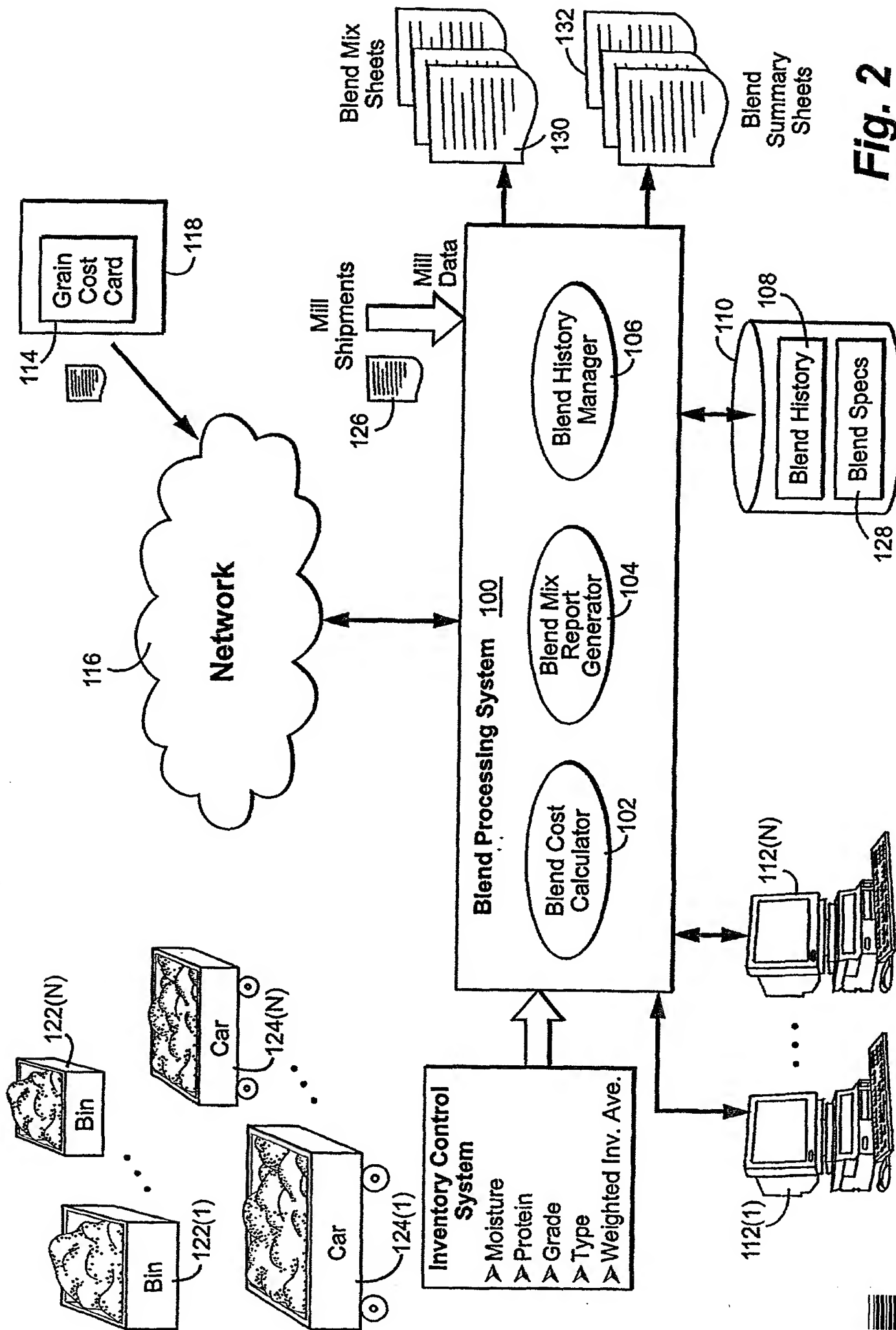


Fig. 2



30173

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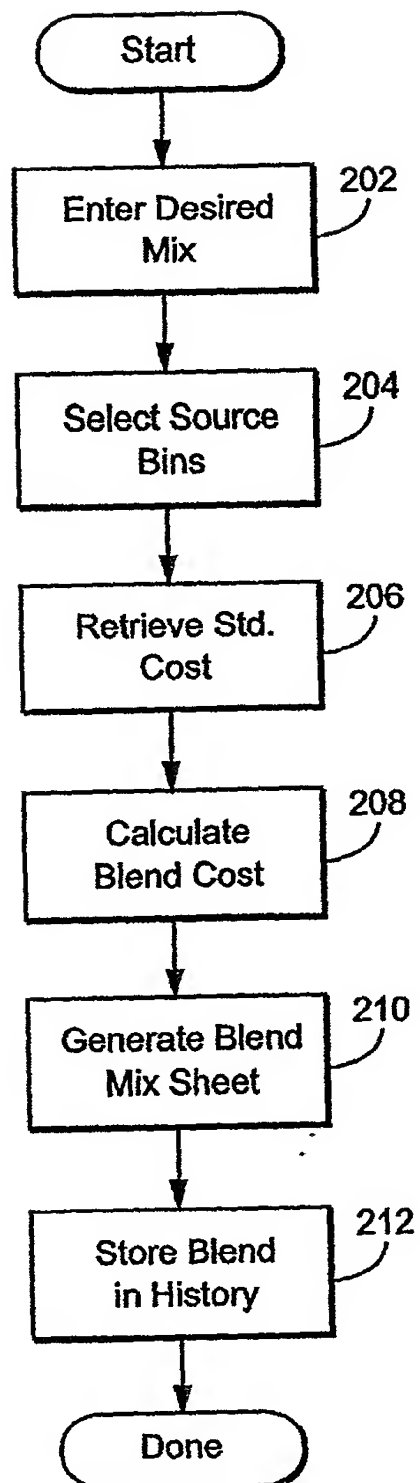
FOOT 928000T

METHOD AND SYSTEM FOR OPTIMIZING INGREDIENT  
BLENDING

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GMI Docket No. 5605USA

Page 3 of 12 pages



**Fig. 3**



30173

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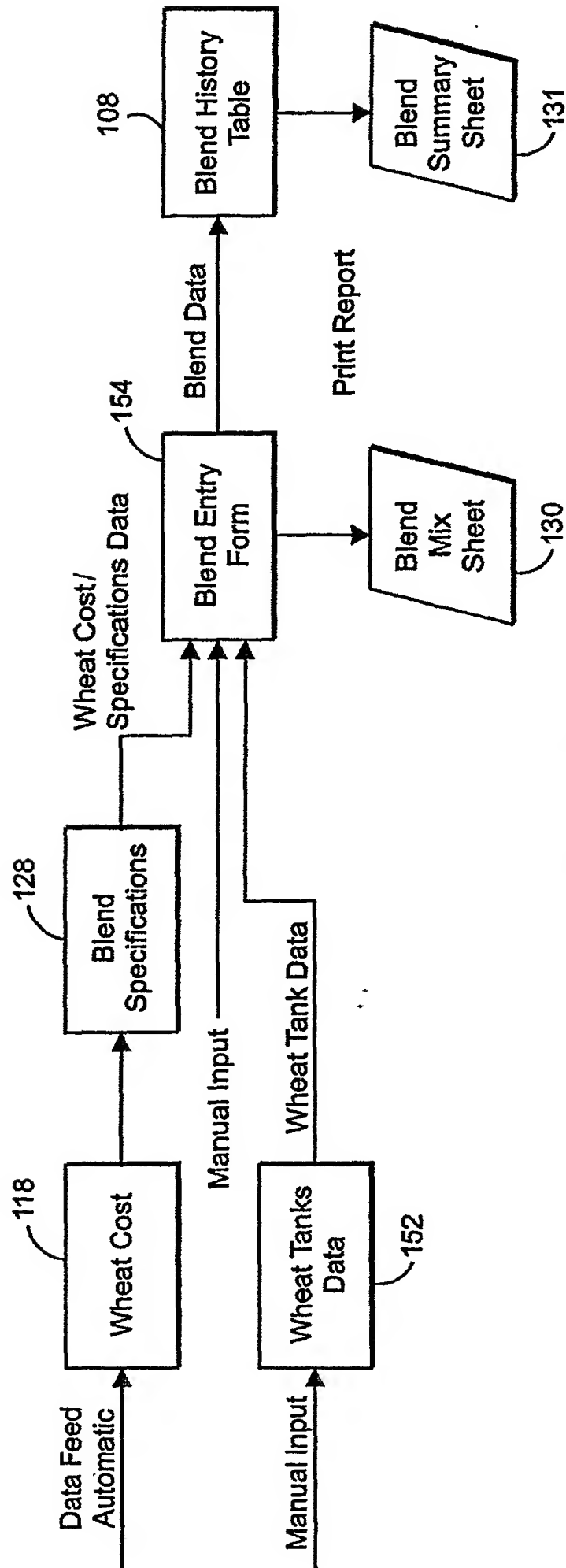


Fig. 4



30173

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Blend Menu

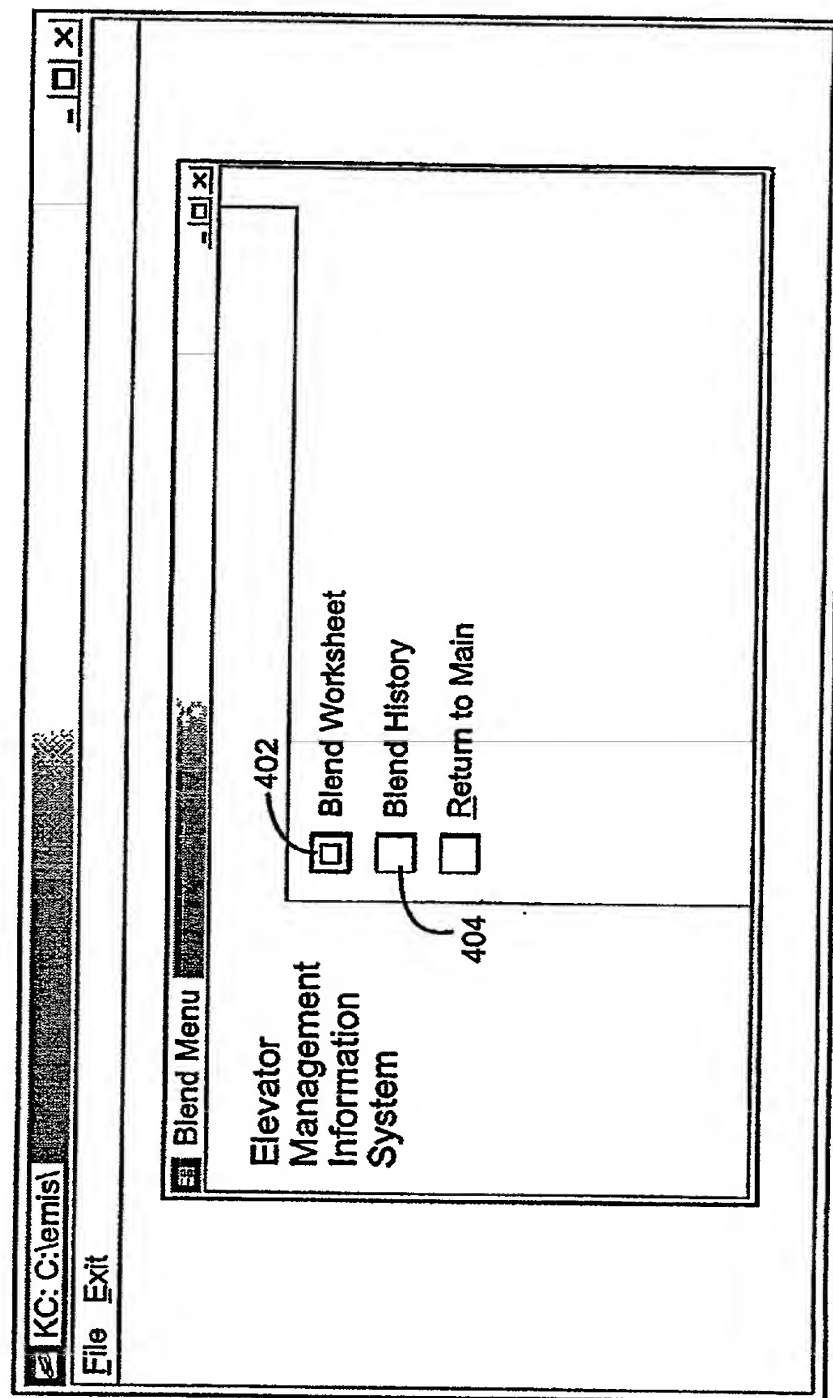


Fig. 5



30173

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GMI Docket No. 5605USA

Page 6 of 12 pages

Initial Blend Screen 404

Blend Menu 406

History Archive Cost Card 410

Delete Add 408

Target Bin: 203

Mix #: 118

Mill Date(s): 03/29/2001

Mill: A

Flour Grade: K

Length of Run (hrs): 0

Bushels: 10000

402

154

414

Bin Number	Bin Lot	Cost Card Lot	Prot 12%	%	BU	Std. BU	LBS	TW	Moist.
3002	USWTR120	USWTR120	12.0	50%	5000	0	0	60.7	11.2
3003	USWTR110	USWTR110	11.1	50%	5000	0	0	59.7	11.7
*			0.0	0%	0	0	0	0.0	0.0

TOTALS FOR BLEND: 11.6 100% 10000 0 60.2 11.4

Blend Savings: \$50.00 \$0.01

Cost of Blend				Cost of Standard Blend			
Percent	Lot	Protein (12%)	Cost	Percent	Lot	Protein (12%)	Cost
50.0%	USWTR120	12.0	\$3.62	100.0%	USWTR120	12.0	\$3.62
50.0%	USWTR110	11.1	\$3.61				
0.0%							
SUM: 11.550 TOTAL: \$3.61				TOTAL: \$3.62			

Measured Prot. 0 Measured TW 0 Measured Moist 0

Comments:

Record: 14 1 of 12

Fig. 6



30173

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# METHOD AND SYSTEM FOR OPTIMIZING INGREDIENT BLENDING

Inventors: Sara J. Trenhaile

GMI Docket No. 5605USA

Page 7 of 12 pages

X

**Cost Card Lot**

2100100000 was not found on the cost card.  
Select the closest log from the cost card list.

OK

KC: C:\emis\ - [Blend Sheet]

\_ □ X

File Exit

\_ □ X

Delete Add

**Target Bin:** 201

**Mix #:** 250  
**Mill:** A  
**Flour Grade:** H K MIX  
**Length of Run (hrs):** 0

**Mill Date(s):** 04/24/2001

**Bushels:** 10000

Bin Number	Bin Lot	Cost Card Lot	Prot 12%	%	BU	Std. BU	LBS	TW	Moist.
603	2100100000	USSPR140	11.0	0%	0	0	0	61.1	11.4
		USSPR140	0.0	0%	0	0	0	0.0	0.0
*		USSPR145							
		USSPR150							
		USSPR155							
		USSPR160							
		USSPR165							
		USSPR170	0.0	0%	0	0	0	0.0	0.0
		USSRW000							
TOTALS			0.0%						
Blend Savings			\$0.00						
									\$4.02

**Cost of Blend**

Percent	Lot	Protein [12%]	Cost	Cost Ext.
50.0%	USWTR120	12.0	\$3.62	\$1.81
50.0%	USWTR110	11.1	\$3.61	\$1.80
0.0%				
SUM:			11.550	TOTAL: \$3.61

**Cost Card Date:** 03/01/2001

**Cost of Standard Blend**

Percent	Lot	Protein [12%]	Cost	Cost Ext.
100.0%	USWTR120	12.0	\$3.62	\$3.62
TOTAL:				\$3.62

Measured Prot. 0

Measured TW 0

Measured Moist 0

Comments:

Record: 1 of 12

**Fig. 7**



30173

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Blend Menu

Blend Mix Sheet

04/24/2001

Kansas City Elevator

Mix #: 113

Mills: A

Length of Run (hrs.): 0

Bushels: 10000

Target Bin: 203

Mill Date: 03/29/2001

GRADE: K KMIX

Bin #	Percent	Prot. 12% MB	Prot. 14% MB	Bushels	Test Wt	Moisture	Lot	CC Lot
3002	50%	12.0	11.7	5000	60.7	11.2	USWTR120	USWTR120
3003	50%	11.1	10.8	5000	59.7	11.7	USWTR110	USWTR110
Totals For Blend:					11.6	11.3	10000	60.2 11.4

Blend Savings: \$50.00 \$0.01

Cost of Blend

Percent	Lot	Prot. 12	Cost	Cost Ext.
50%	USWTR120	12.0	\$3.62	\$1.81
50%	USWTR110	11.1	\$3.61	\$1.80
100%				\$3.61

Cost of Standard Blend

Percent	Lot	Prot. 12	Cost	Cost Ext.
100%	USWTR120	12.0	\$3.62	\$3.62
100%				\$3.62

Measured TW: 0

Measured Moisture: 0

Measured Protein: 0

COMMENTS:

Fig. 8





 KC: C:\emis\ - [rptBlendMixSheet : Report]

File Exit

## Blend Mix Sheet

04/24/2001

## Kansas City Elevator

**Mix #: 153**

**File: A**

**Length of Run (hrs.): 0**

Business 10000

**GRADE: E**

**Target Bin: 3015**

**Print Date: 04/19/2001**

Blin #	Percent	Prot. 12% MB	Prot. 14% MB	Bushels	Test Wt	Moisture	Lot	CC Lot
1001	50%	0.0	0.0	5000	0.0	0.0	USWTR110	USWTR110
3016	50%	11.7	11.4	5000	61.2	12.2	USWTR115	USWTR115
Totals For Blend:		5.8	5.7	10000	30.6	6.1		

**Blend Savings:** **\$7,025.0** **\$0.70**

### Cost of Blood

Percent	Lot	Prot. 12	Cost	Cost Ext.
50%	USWTR110	0.0	\$3.61	\$1.80
50%	USWTR115	11.7	\$3.62	\$1.81
100%				\$3.61

### Cost of Standard Blend

Cost Card Data: 1:10:33 PM				
Percent	Lot	Prod. 12	Cost	Cost Ext.
80%	USSPR155	15.5	\$4.33	\$3.46
20%	USSPR150	15.0	\$4.28	\$0.86
100%				\$4.32

**Measured T<sub>1</sub>:**



## Measured Moisture



**Measured Protein:**



## COMMENTS:

**Fig. 8A**



30173

Blend History

KC: C:\emls\ - [Blend Sheet]

File Exit

Mix History

Retrieve Reset Delete

MIX # Flour Grade Milling Dt Grade Mill Bushes Savings

115	A	04/10/2001	A MIX	A	1000.0	(\$338.80)
20	C	04/10/2001	A MIX	C	3751.0	(\$618,759.71)
203	A	01/06/2001	A MIX	A	1952.0	\$63.44
204	C	01/16/2001	A MIX	C	975.00	\$969.74
206	C	02/15/2001	A MIX	C	3126.0	\$48.14
302	C	08/15/2001	A MIX	C	3753.00	\$93.45

Milling Date

Cost Card Dt Target Bin Savings

03/10/2001	201	(\$338.80)
03/19/2001		(\$618,759.71)
04/01/2001		\$63.44
04/05/2001		\$969.74
03/02/2001		\$48.14
04/10/2001		\$93.45

Fig. 9



30173

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# METHOD AND SYSTEM FOR OPTIMIZING INGREDIENT BLENDING

Inventors: Sara J. Trenhaile

GMI Docket No. 5605USA

Page 11 of 12 pages

KC: C:\emis\

File

Exit

Mix History

Retrieve

Reset

Delete

MIX #

Flour Grade

AZ

Milling Date

Mix #	Milling Dt	Grade	Mill	Bushels	Length	Cost Card Dt	Target Bin	Savings
20	03/10/2001	A MIX	A	1000.00	0	03/30/2001	201	(\$618,759.71)
203	04/10/2001	A MIX	C	3751.00	3	03/19/2001		\$63.44
204	01/06/2001	A MIX	A	1952.00	3	04/01/2001		\$968.74
206	01/16/2001	A MIX	C	975.00	2	04/05/2001		\$48.14
302	02/15/2001	A MIX	C	3126.00	2.5	03/02/2001		\$93.45
	08/15/2001	A MIX	C	3753.00	3	04/10/2001		

Fig. 9A



30173

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TD80T 92800T

Inventors: Sara J. Trenhaile

GMI Docket No. 5605USA

Page 12 of 12 pages

Blend History

Mix History

Retrieve

Reset

Delete

MIX #

Flour Grade

AZZ

Milling Date

Mix #	Milling Dt	Grade	Mill	Bush
115	04/10/2001	A MIX	A	1000
203	04/10/2001	A MIX	C	3751
204	01/06/2001	A MIX	A	1952
205	01/16/2001	A MIX	C	9750
302	02/15/2001	A MIX	C	3126
	08/15/2001	A MIX	C	3753

Blend History

04/24/2001

Kansas City Elevator

Mix #:115

Mill: A

Length of Run (hrs.): 0

Bushels: 1000

Grade: A MIX

Cost Card Date: 03/30/2001

Target Bln: 201

Mill Date(s): 04/10/2001

Blend Mix Cost: \$3.95

Cost Card Mix Cost: \$3.61

Ingredient Cost: \$3,946.30

Over Standard: (\$338.80)

TW: 60.8

Moisture: 12.2

Protein: 13.6

Measured TW: 65

Measured Moisture: 2

Measured Protein: 15

COMMENTS:

131

Fig. 10



30173